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10/053,989	01/19/2002	Curtis Gregory Kelsay	10017364-1	5126

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

WORKU, NEGUSSE

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/053,989

Applicant(s)

KELSAY, CURTIS GREGORY

Examiner

NEGUSSIE WORKU

Art Unit

2625

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-22 and 33-35 is/are allowed.
- 6) ☒ Claim(s) 23-25 and 29-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 02/13/08 have been carefully reviewed, and respectfully considered, but they are not persuasive.

Regarding claims 23 and 29 the Applicant alleged that the combination of the prior art as applied to claims 23 and 29, fails to show or suggest, "the stationary track within the scanner body; providing a motive source supported by the light bar assembly; and moving the light bar assembly along the stationary track using the motive source".

In response, the Examiner respectfully disagrees because the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In this case, the Examiner asserts that the combination of the references cited when considered as a whole clearly teaches that "providing a motive source that is a motor 5 of fig 1 supported by the light bar assembly 15 of fig 1, and moving the light bar assembly, using the motive source, (i.e., scanner assembly 15 of fig 1, which includes light source moving back and forth using motor 5, as discussed in col. 4, lines 1-7.

Yamauchi (702) does not teach using stationary track with in the scanner body. However, Novak et al., in the same area of lithographic scanning system, as shown in fig 1 and 2 teaches a drive track, i.e., track 44 of fig 2, supported within the scanner body, shown in fig 2, see col.5, lines 20-30.

Therefore, It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging device of Yamauchi (702) by the teaching of Novak et al., because of the following reasons: (a) It would have allow users to reduce a vibration with in the scanner body that might affect the distribution of light over the object to be scanned.

(b) It would have help users to avoid a shift of the electron beam by a magnetic fields that cause misalignment of the pattern on the article, as discussed by Novak et al, in col.1, lines 62-68 through col.2, lines

In view of the above, having the system of Yamauchi '702' and then given the well- established teaching of Novak '534', the Examiner asserts that it would have been obvious to one having ordinary skill in the art at the time of the invention made to combine both prior art, for the purpose of reducing the size of the scanner device.

Further, In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.

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1988), and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation combining the reference has been suggested by Novak '534' as discussed above.

For the above reasons, the Examiner asserts that the combination of Yamauchi '702' and Novak '534' '829, does in fact show the present claimed invention is known to ordinary skilled in the art at the time of the invention was made, thus, the rejections are maintained as follows:

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 23-25, 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al. (USP 6,717,702), in view of Novak et al. (USP 6,753,534).

With respect to claim 23, Yamauchi (702) teaches a method of moving a light bar assembly (15 of fig 1), within a scanner body (11 of fig 1) of an optical scanning apparatus (image scanner of fig 15 of fig 1), comprising: providing a motive source (motor 5 of fig 1) supported by the light bar assembly (15 of fig 1); and moving the light bar assembly, using the motive source, (scanner assembly 15 of fig 1, which includes light source moving back and forth using motor 5, col. 4, lines 1-7).

Yamauchi (702) does not teach using stationary track within the scanner body.

Novak et al., in the same area of lithographic scanning system, (as shown in fig 1 and 2), teaches a drive track, (track 44 of fig 2) supported within the scanner body, (fig 2, col.5, lines 20-30).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Yamauchi (702) to include: stationary track within the scanner body.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging device of Yamauchi (702) by the teaching of Novak et al., because of the following reasons: (a) It would have allowed users to reduce a vibration within the scanner body that might affect the distribution of light over the object to be scanned. (b) It would have helped users to avoid a shift of the electron beam by a magnetic field that causes misalignment of the pattern on the article, as discussed by Novak et al. in col.1, lines 62-68 through col.2, lines

With respect to claim 24, Yamauchi (702) teaches the method, and wherein the light bar assembly (15 of fig 1) is moved to a plurality of positions, the method further comprising determining the position of the light bar assembly as it is moved (control 26, having a determining function on the position of scanning device 15, which includes light source, col.5, lines 1-5).

Yamauchi (702) does not teach a stationary track within the scanner body.

Novak et al., in the same area of lithographic scanning system, (as shown in fig 1 and 2), teaches a drive track, (track 44 of fig 2) supported within the scanner body, (fig 2, col.5, lines 20-30).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Yamauchi (702) to include: a stationary track with in the scanner body.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging device of Yamauchi (702) by the teaching of Novak et al., because of the following reasons: (a) It would have allow users to reduce a vibration with in the scanner body that might affect the distribution of light over the object to be scanned. (b) It would have help users to avoid a shift of the electron beam by a magnetic fields that cause misalignment of the pattern on the article, as discussed by Novak et al, in col.1, lines 62-68 through col.2, lines 1-5.

With respect to claim 25, Yamauchi (702) teaches the method, (fig 1) and further comprising urging the light bar assembly (15 of fig 1) against the stationary track (shaft 3 of fig 1), while moving the light bar assembly (moveable unit 15 of fig 1) along the shaft 3 of fig 1, (light source unit 15 of fig 4, to moves parallel along the guide bar 3 of fig 1).

Yamauchi (702) dose not teach using stationary track with in the scanner body.

Novak et al., in the same area of lithographic scanning system, (as shown in fig 1 and 2), teaches a drive track, (track 44 of fig 2) supported within the scanner body, (fig 2, col.5, lines 20-30).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Yamauchi (702) to include: stationary track with in the scanner body.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging device of Yamauchi (702) by the teaching of Novak et al., because of the following reasons: (a) It would have allow users to reduce a vibration with in the scanner body that might affect the distribution of light over the object to be scanned. (b) It would have help users to avoid a shift of the electron beam by a magnetic fields that cause misalignment of the pattern on the article, as discussed by Novak et al, in col.1, lines 62-68 through col.2, lines 1-5.

With respect to claim 29, Yamauchi (702) teaches the method (fig 4) and further comprising urging the light bar assembly (15 of fig 1), while moving the light bar assembly (15 of fig 1).

Yamauchi (702) dose not teach a stationary track with in the scanner body.

Novak et al., in the same area of lithographic scanning system, (as shown in fig 1 and 2), teaches a drive track, (track 44 of fig 2) supported within the scanner body, (fig 2, col.5, lines 20-30).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Yamauchi (702) to include: stationary track with in the scanner body.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging device of Yamauchi (702) by the teaching of Novak et al., because of the following reasons: (a) It would have allow users to avoid a vibration with in the scanner body that might affect the distribution of light over the object to be scanned. (b) It would have help users to avoid a shift of the electron beam by a magnetic fields that cause misalignment of the pattern on the article, as discussed by Novak et al, in col.1, lines 62-68 through col.2, lines

With respect to claim 30, Yamauchi (702) teaches the scanner (fig 1 and 2A) further comprising a support member (holder 7 of fig 1) the light (light source 15), and the motor (5 of fig 1) fixedly attached to the support member (scanner body 11 of fig 3), the support member (7 of fig 1) movable within the scanner (scanner body 11 of fig 1).

With respect to claim 31, Yamauchi (702) teaches the scanner (fig 1) wherein the motor (5 of fig 1) is configured to linearly move the support member (guide bar 3 of fig 1) within the scanner (scanner body 15 of fig 1).

With respect to claim 32, Yamauchi (702) teaches the scanner (fig 1), wherein the motor (5 of fig 1) is connected to the drive wheel (transmission 8 of fig 1, which includes pulley 14 fig 1) via a series of meshing gears, (14 of fig 1) the drive wheel (8 of fig 1) contacting a track (motor shaft 3 of fig 1) within the scanner, (15 of fig 1) the drive wheel (pulley 14 of fig 1) carried by the support member (a shaft or a guide bar 3 of fig 1, with holder 7 of fig 1, col.3, lines 62-67).

With respect to claim 36, Yamauchi (702) teaches an optical scanning apparatus (image scanner of fig 1) comprising: a scanner body (scanner housing 11 of fig 1); and a self-propelled light bar assembly (scanning assembly 15 of fig 1, which includes light source unit, image sensor 15, to move parallel along the guide shaft 3, simultaneously with motor 5 of fig 1); and wherein the light bar assembly comprises a linear electric motor configured to propel the light bar assembly (supported within the scanner body of frame 1, supported by holder 7 of fig 1, col.3, lines 35-60).

Allowable Subject Matter

4. The following is a statement of reasons for the indication of allowable subject matter: 12-22, 33-35 are allowed.

Claims 12-22 and 33-35 are allowed for the reasons the prior art searched and of record neither anticipates nor suggests the claimed invention as amended.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **NEGUSSIE WORKU** whose telephone number is (571)272-7472. The examiner can normally be reached on 9A-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Negussie Worku/

Examiner, Art Unit 2625

/Edward L. Coles/

Supervisory Patent Examiner, Art Unit 2625